APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,442	09/30/2003	Ronald H. Naismith	SAA-101	2441

23569   7590   05/30/2007
SCHNEIDER ELECTRIC / SQUARE D COMPANY
LEGAL DEPT. - I.P. GROUP
1415 S. ROSELLE ROAD
PALATINE, IL 60067

EXAMINER
DAVENPORT, MON CHERI S

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
05/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/605,442	NAISMITH ET AL.
	Examiner	Art Unit	
	Mon Cheri S. Davenport	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some *   c)☒ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☒ Certified copies of the priority documents have been received in Application No. <u>09902748</u>.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date *9/30/2003*.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

This Action is in response to the Application filed September 30, 2003.

Priority

1.   Applicant is reminded that in order for a patent issuing on the instant application

to obtain the benefit of priority based on priority papers filed in parent Application No.

09/902,748 under 35 U.S.C. 119(a)-(d) or (f), a claim for such foreign priority must be

timely made in this application. To satisfy the requirement of 37 CFR 1.55(a)(2) for a

certified copy of the foreign application, applicant may simply identify the application

containing the certified copy.

Information Disclosure Statement

The references listed in the Information Disclosure Statement file on September

30, 2003 have been considered by the examiner (see attached PTO-1449 form or

PTO/SB/08A and 08B forms).

Specification

The following guidelines illustrate the preferred layout for the specification of a
utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should
include the following sections in order. Each of the lettered items should appear in
upper case, without underlining or bold type, as a section heading. If no text follows the
section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
        DEVELOPMENT.

(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
    COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37
    CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A
    "Sequence Listing" is required on paper if the application discloses a
    nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if
    the required "Sequence Listing" is not submitted as an electronic
    document on compact disc).

2.   The disclosure is objected to because of the following informalities: Specification

is missing the elements "Background of the invention" and "Brief summary of the

invention".

        Appropriate correction is required.

Examiner Remark

        It is noted that the numbering of claims does not follow the standard format, but

has been interpreted that that [c1] is Claim 1.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

4.   Claims 1-16 rejected under 35 U.S.C. 102(b) as being anticipated by Hauet (US

Patent Number 6,799,077).

5.   With respect to **Claim 1**, it is noted that the language used by Applicant merely
suggest or makes optional those features described as "capable of"; It has been held
that the recitation that an element is "capable of" perform a function is not a positive
limitation but only requires the ability to so perform. It does not constitute a limitation in
any patentable sense. In re Hutchison, 69 USPQ 138.

Regarding **Claim 1** Hauet discloses a programmable logic controller comprising
(see figure 3):

a backplane of the programmable logic controller *(see figure 3, section 17',
automatic controllers) (section 19, local area networks)*;

one or more modules connected to said backplane *(see figure 3, section 18,
18', 18", I/O units);* said

modules capable of communicating over said backplane using the IP protocol*(
see col. 5, lines 62-66, the units are capable of transmitting and receiving IP
datagrams);*

wherein each module has its own IP address *(see col. 5, lines 58-66, the units
are individually provided with HTTP servers, and have Internet-type addresses).*

Regarding **Claim 2** Hauet discloses everything as applied above (*see claim 1*). In
addition the programmable logic controller includes:

wherein the IP address uses a local addressing schema *(see col.5, lines 58-66,
the Internet-type address, comply with HTTP/TCP/IP protocols of the industrial
local area networks).*

Regarding **Claim 3** Hauet discloses everything as applied above (*see claim 2*). In
addition the programmable logic controller includes:

wherein the local addressing schema is in a form of 192.168.XX.YY*(see col.5,
lines 58-66, the Internet-type address, comply with HTTP/TCP/IP protocols of the
industrial local area networks).*

Regarding **Claim 4** Hauet discloses everything as applied above (*see claim 3*). In
addition the programmable logic controller includes:

wherein a term XX in the addressing schema represents the number of the
programmable logic controller *(customer/server request)(see col. 6, lines 31-36, the*

LAN of a cluster of units conveys IP diagrams corresponding to the customer/server request coming from or via the shared unit, see col.5, lines 58-66).

Regarding **Claim 5** Hauet discloses everything as applied above (*see claim 3*). In addition the programmable logic controller includes:

wherein a term YY in the addressing schema represents a number describing a position in said backplane *(see col. 6, lines 20-30, the customer unit has an HTTP/TCP/IP protocol stack available to address its request and take into count information received from server).*

Regarding **Claim 6** Hauet discloses everything as applied above (*see claim 1*). In addition the programmable logic controller includes:

wherein the IP protocol is used in conjunction with a TCP protocol *(see col. 5, lines 58-62, units are individually provided HTTP/TCP/IP protocols address).*

Regarding **Claim 7** Hauet discloses a method of communication between a first module and a second module on a programmable logic controller backplane comprising *(see col. 5, lines 9-18):*

connecting said first modules to said programmable logic controller backplane wherein the first module is connected to a network of IO modules *(see col. 5, lines 9-18, programmed operating units suited at the interface, with I/O units , see figure 3);*

connecting said second module to said programmable logic controller backplane wherein the second module is connected to an Ethernet network *(see figure 3, section 9, server) (see figure 3, see col. 5, lines 9-18);*

communicating between said first module and said second module *(see col. 2, lines 22-37)* using the IP protocol, where the first module and the second module have their own IP address for backplane communications*(see col. 5, lines 58-66, the units are individually provided with HTTP servers, and have Internet-type addresses)..*

Regarding **Claim 8** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein the Ethernet network is connected to an Internet *(see col. 4, lines 25-31).*

Regarding **Claim 9** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein an addressing schema for the IP address uses a local addressing schema *(see col.5, lines 58-66, the Internet-type address, comply with HTTP/TCP/IP protocols of the industrial local area networks).*

Regarding **Claim 10** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein the network of IO modules*(see col. 5, lines 9-18, programmed operating units suited at the interface, with I/O units , see figure 3)* is an Ethernet network*(see figure 3, section 9, server) (see figure 3, see col. 5, lines 9-18).*

Regarding **Claim 11** Hauet discloses everything as applied above (*see claim 7*). In addition the method of communication includes:

wherein the IP protocol is used in conjunction with a TCP protocol *(see col. 5, lines 58-62, units are individually provided HTTP/TCP/IP protocols address).*

Regarding **Claim 12** Hauet discloses an industrial automation system comprising:

at least one programmable logic controller that is capable of communicating messages to a backplane, wherein the messages are formatted using an IP protocol *(see col. 4, lines 1-45, see figure 2);*

a first network module **(section 18, site unit)** connected to said backplane **(section 19, LAN)** that is also connected to an IO network *(section 9, server) (see figure 3)* ; and

a second network module (**section 18', site unit)** connected to said backplane (**section 19, LAN**) that is also connected to an Ethernet network (**section 9, server)** wherein the programmable logic controller **(section 17, automatic controllers),** the first network module **(section 18, site unit),** and the second network module (**section 18', site unit)** each have their own IP address for backplane communications*(see col. 5, lines 58-66, the units are individually provided with HTTP servers, and have Internet-type addresses).*

Regarding **Claim 13** Hauet discloses everything as applied above (*see claim 12*). In addition the industrial automation system includes:

wherein said Ethernet network is connected to an Internet(*see col. 4, lines 25-31).*

Regarding **Claim 14** Hauet discloses everything as applied above (*see claim 12*). In addition the industrial automation system includes:

wherein the IP messages are addressed using a local addressing schema*(see col.5, lines 58-66, the Internet-type address, comply with HTTP/TCP/IP protocols of the industrial local area networks)*.

Regarding **Claim 15** Hauet discloses everything as applied above (*see claim 12*). In addition the industrial automation system includes:

wherein the IO network *(see col. 5, lines 9-18, programmed operating units suited at the interface, with I/O units , see figure 3)* is an Ethernet network*(see figure 3, section 9, server) (see figure 3, see col. 5, lines 9-18)*.

Regarding **Claim 16** Hauet discloses everything as applied above (*see claim 12*). In addition the industrial automation system includes:

wherein the IP protocol is used in conjunction with a TCP protocol *(see col. 5, lines 58-62, units are individually provided HTTP/TCP/IP protocols address)*.

Citation of Pertinent Prior Art

6.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Swales (US Patent Number 6,321,272) see abstract.

Lelaure et al. (US Patent Number 6,640,314) see abstract.

Ogawa et al. (US Patent Number 6,594,227) see abstract.

Papadopoulos et al. (US Patent Number 6,282,454) see abstract, see figure 2-

3.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mon Cheri S. Davenport whose telephone number is

571-270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. -

5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD/md
April 30, 2007

5-09-07

LANA LE
PRIMARY EXAMINER